PROPOSAL FOR A GENETICS RESEARCH CENTER

Submitted to the

National Institute of

General Medical Sciences

June 1, 1973

School of Medicine
Stanford University

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DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

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GRANT APPLICATION TO BE COMPLETED BY PRINCIPAL INVESTIGATOR (Items 1 through 7 and 15A) 1. TITLE OF PROPOSAL (Do not exceed 53 typewriter speces) Genetics Research Center 3. DATES OF ENTIRE PROPOSED PROJECT PERIOD (This application) 2. PRINCIPAL INVESTIGATOR THROUGH 2A. NAME (Last, First, Initial) 1/1/74 12/31/78 Lederberg, Joshua TOTAL DIRECT COSTS RE-DIRECT COSTS REQUESTED 28. TITLE OF POSITION QUESTED FOR PERIOD IN FOR FIRST 12-MONTH PERIOD ITEM 3 \$537,800 Professor and Chairman \$2,659,305 6. PERFORMANCE SITE(S) (See Instructions) 2C. MAILING ADDRESS (Street, City, State, Zip Code) Department of Genetics Department of Genetics and Stanford University School of Medicine Department of Pediatrics Stanford, California 94305 Stanford University School of Medicine Stanford, California 94305 2E. SOCIAL SECURITY NO. 20. DEGREE Ph.D. 2F. TELE- Ares Code TELEPHONE NUMBER AND EXTENSION PHONE 415 321-1200 Ext. 5801 2G. DEPARTMENT, SERVICE, LABORATORY OR EQUIVALENT (See Instructions) Depts, of Genetics and Pediatrics 2H. MAJOR SUBDIVISION (See Instructions) N/A B. Inventions (Renewel Applicants Only - See Instructions) 7. Research Involving Human Subjects (See Instructions) A. NO B. YES - Not previously reported A. NO B. YES Approved: C. X YES - Pending Review 6-29-73 C. TYES - Previously reported Date TO BE COMPLETED BY RESPONSIBLE ADMINISTRATIVE AUTHORITY (Items 8 through 13 and 158) 11. TYPE OF ORGANIZATION (Check applicable item) 9. APPLICANT ORGANIZATION(S) (See Instructions) FEDERAL STATE LOCAL TOTHER (Specify) Stanford University Private, non-profit 12. NAME, TITLE, ADDRESS, AND TELEPHONE NUMBER OF OFFICIAL IN BUSINESS OFFICE WHO SHOULD ALSO BE Stanford, California 94305 IRS No. 94-1156365 NOTIFIED IF AN AWARD IS MADE Congressional District No. 17 K.D. Creighton Deputy Vice President for Business & Finance Stanford University Stanford, California 94305 10. NAME, TITLE, AND TELEPHONE NUMBER OF OFFICIALIS Telephone Number (415) 321-2300 X2251 SIGNING FOR APPLICANT ORGANIZATION(S) 13 IDENTIFY ORGANIZATIONAL COMPONENT TO RECEIVE CREDIT FOR INSTITUTIONAL GRANT PURPOSES (See Instructions) Kathleen C. Butler 01 School of Medicine Sponsored Projects Officer ENTITY NUMBER (Formerly PHS Account Number) 14. c/o Sponsored Projects Office 458210 2883 Telephone Number (sl (415) 321-2300 Ext. 15. CERTIFICATION AND ACCEPTANCE. We, the undersigned, certify that the statements herein are true and complete to the best of our knowledge and accept, as to any grant awarded, the obligation to comply with Public Health Service terms and conditions in effect at the time of the

SIGNATURES (Signetures required on	A. SIGNATURE OF PERSON NAMED IN ITEM 2A	(See also page i)	MAY 3 0 1973
original copy only. Use ink, "Per" signatures not acceptable)	B. SIGNATURE (S) OF PERSON(S) MAMED IN ITEM 10		5/30/73

SECTION 1

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE PUBLIC HEALTH SERVICE

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PROJECT NUMBER

RESEARCH OBJECTIVES

NAME AND ADDRESS OF APPLICANT ORGANIZATION

Stanford University, Stanford, California 94305

NAME, SOCIAL SECURITY NUMBER, OFFICIAL TITLE, AND DEPARTMENT OF ALL PROFESSIONAL PERSONNEL ENGAGED ON PROJECT, BEGINNING WITH PRINCIPAL INVESTIGATOR

Joshua Lederberg, Professor and Chairman, Department of Genetics
Howard Cann, Associate Professor of Pediatrics, Dept. of Pediatrics
Norman Kretchmer, Professor of Pediatrics, Department of Pediatrics
Leonard Herzenberg, Professor of Genetics, Department of Genetics
Luca Cavalli-Sforza, Professor of Genetics, Department of Genetics
Luigi Luzzatti, Professor of Pediatrics and Community and Preventive Medicine,

Department of Pediatrics and Community and Preventive Medicine

Clifford R. Barnett, Associate Professor of Pediatrics, Professor of Anthropology,
Department of Pediatrics *(CONTINUED BELOW)

TITLE OF PROJECT

GENETICS RESEARCH CENTER

USE THIS SPACE TO ABSTRACT YOUR PROPOSED RESEARCH, OUTLINE OBJECTIVES AND METHODS, UNDERSCORE THE KEY WORDS (NOT TO EXCEED 10) IN YOUR ABSTRACT.

A comprehensive program of basic and clinical research, uniting the efforts of the Department of Genetics and Pediatrics, will apply advances in analytical instrumentation to problems of genetic polymorphism and disease in man.

Program areas include:

Genetic errors of metabolism identified by computer-managed gas chromatography and mass spectrometry, applied to urine, blood and amniotic fluid;

Detection of <u>fetal cells</u> in maternal circulation; Expression of genetic markers in fetal cells, <u>linkage</u> studies; <u>antenatal diagnosis</u>; Polymorphisms involving specific binding to plasma proteins; Psychological impact of genetic disease and <u>counseling</u> practices.

*	Kenneth Tsuboi, Sr. Scientist, Department of Pediatrics	
	Alan Duffield, Research Associate, Department of Genetics	
	Wilfried Pereira, Jr., Research Associate, Department of Genetics	

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The undersigned agrees to accept responsibility for the scientific and technical conduct of this project and for provision of required progress reports if a grant is awarded as the result of this application.

MAY 3 0 1973

Date

Joshua Lederberg, Principal Investigator

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